

ABSTRACT

The object of the present invention is to provide a substrate for device bonding, which enables bonding of a device with high bond strength to an Au electrode formed on a substrate such as aluminum nitride by soldering the device at a low temperature using a soft solder metal having a low melting point such as an Au-Sn-based solder having an Au content of 10% by weight. The substrate for device bonding of the present invention comprises a substrate having an Au electrode layer formed on its surface and in which (i) a layer composed of a platinum group element, (ii) a layer composed of at least one transition metal element selected from the group consisting of Ti, V, Cr and Co, (iii) a barrier metal layer composed of at least one metal selected from the group consisting of Ag, Cu and Ni and (iv) a solder layer composed of a solder containing Sn or In as a main component are laminated in this order on the Au electrode layer.